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Notice of Allowability	Application No.	Applicant(s)	
	10/724,310	ROGERS ET AL.	
	Examiner	Art Unit	
	Alan Diamond	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed November 1, 2004.
2. ☒ The allowed claim(s) is/are 1-38,40-67 and 69-102.
3. ☒ The drawings filed on 01 November 2004 and 26 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>11192004</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Gary Lueck on November 22, 2004.

The application has been amended as follows:

In The Specification

In the Amendment to the specification submitted by Applicant on November 1, 2004, on page 2 labeled by Applicant in said Amendment, the second line of said page 2 refers to "page 7, line 11" for an amendment to the originally filed specification. Please change said "page 7, line 11" to --page 7, line 14-- so that the amended paragraph on page 7 of the originally filed specification is the one beginning on line 14, not line 11.

In the Amendment to the specification submitted by Applicant on November 1, 2004, on page 2 labeled by Applicant in said Amendment, at the fifth line of said page 2, please insert a semicolon --;-- after the word "components".

In The Claims

In claim 1, at line 12, after "of the" please insert --one or more--.

In claim 32, after "wherein" please insert --all of--.

In claim 33, please delete "30" and insert in its place --1--.

In claim 33, after "wherein" please insert --a component of--.

In claim 48, at line 2, please delete "a".

In claim 51, at line 2, please delete "a".

In claim 53, at line 2, please delete "the plurality of elements including" and insert in its place --including the following power system elements--.

In claim 53, at line 17, after "each" please insert --respective--.

In claim 53, at line 17, please delete "element" and insert in its place --member--.

In claim 53, at line 18, after "of the" please insert --one or more--.

In claim 69, after "wherein" please insert --all of--.

In claim 70, please delete "69" and insert in its place --53--.

In claim 70, after "wherein" please insert --a component of--.

At line 2 in each of claims 100, 101, and 102, please delete "and none of the power system elements are in an atmosphere or airborne".

2. The following is an examiner's statement of reasons for allowance: With respect to instant independent claims 1 and 85, Henderson et al (U.S. 4,368,415) lacks the at least one intermediate power system element in space that receives sunlight from one power system element in space and transmits the sunlight to another power system element in space. Henderson et al also lacks the instant distributed control system in said claims 1 and 85, wherein the control system maintains alignment of the free-floating power system elements based on communication between control system components of adjacent power system elements. With respect to instant independent claim 53, Henderson et al lacks the instant primary and intermediate mirrors.

With respect to said claims 1 and 85, Mikami et al (U.S. 2001/0035207) lacks the at least one intermediate power system element in space that receives sunlight from one power system element in space and transmits the sunlight to another power system element in space.

Mikami et al and Takada et al (U.S. 2003/0098058) lack the instant distributed control system in said claims 1 and 85, wherein the control system maintains alignment of the free-floating power system elements based on communication between control system components of adjacent power system elements. In Mikami et al and Takada et al, there is a centralized (not a distributed) control system in which the power satellites receive signals from a ground-based command center, or from a control satellite. There is no communication between control system components of adjacent power system elements. Mikami et al's control satellite is not, per se, adjacent any of the power satellites. Thus, Mikami et al can never have communications between control system components of adjacent power system elements because its power satellites never communicate with each other. For the sake of argument, even if the control satellite of Mikami et al or Takada et al was considered to be adjacent to the power satellites, then the limitations of claims 1 and 85 could still not be met because the control satellite, which is free-floating, would not be aligned based on communications with control system components of adjacent power system elements. The free-floating control satellite would, at best, be maintained in its appropriate position/orbit based on signals from the ground. In other words, the alignment of the free-floating satellite would not be

maintained by the instant required communications between control system components of adjacent power system elements.

With respect to claim 53, Mikami et al lacks the instant primary and intermediate mirror. The Examiner agrees with Applicant that Keigler (U.S. 4,371,135) does not solve the deficiencies of Mikami et al. In particular, the Examiner agrees with Applicant that Kiegler's use of a fixed mirror (30) and a mirror (20) that is maintained at a constant orientation to the sun in orbit is at odds with Mikami et al's use of a central control satellite or ground-based command. In other words, Mikami et al is adjusting a whole satellite, whereas Keigler adjusts a mirror. Accordingly, the combination of Mikami et al with Keigler is inappropriate and is withdrawn by the Examiner.

Furthermore, with respect to claim 53, Takada et al (as well any combination of Mikami et al and Keigler) lacks the instant requirement that each respective power system element in space includes a sensor and a displacement member. In claim 53, the primary mirror, intermediate mirror, the power module, the emitter and the reflective mirror are power system elements, and thus, each of these elements includes a sensor and a displacement member. In Takada et al, each respective power system element does not include a sensor and a displacement member. For example, the mirrors (12) and (14) on Takada et al's power satellites do not each include a sensor and a displacement member. Rather, a sensor and displacement member would be on the satellite body for manipulation of the satellite. Note instant Figure 1A, where respective power system components (2,4,5,8,10) include sensors (2a,b, 4a,b, 5a,b, 8a,b, 10a,b)

Art Unit: 1753

and displacement members (2d,e, 4d,e, 5d,e, 8d,e, 10d,e) (see also page 18, lines 14-25, of the instant specification).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Diamond whose telephone number is 571-272-1338. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alan Diamond
November 19, 2004

Alan Diamond
Primary Examiner
Art Unit 1753

